

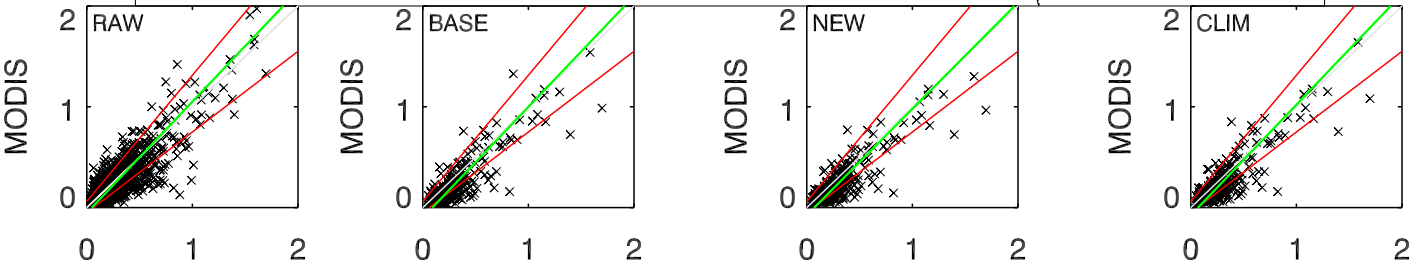
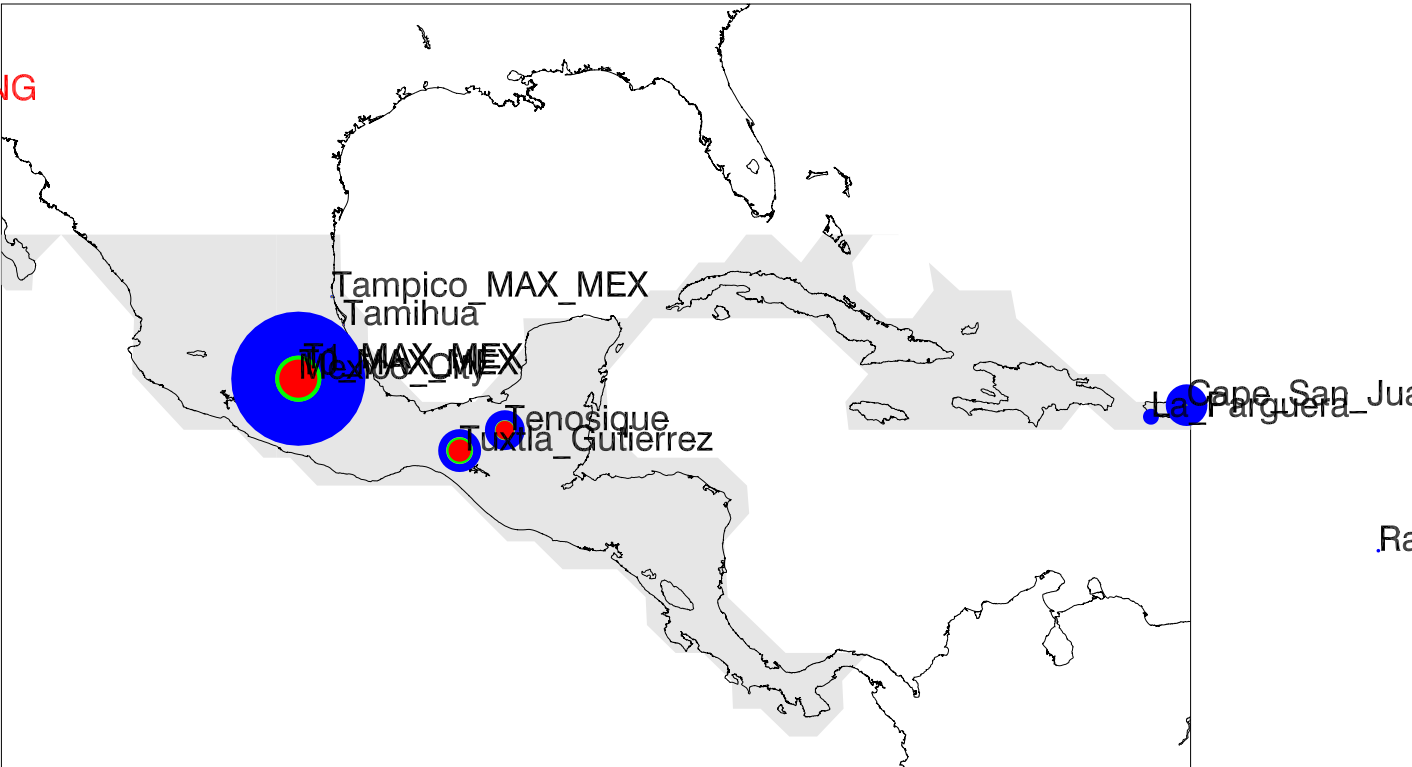
A

18.50N 87.50W Central America

AERONET AOD: N= 1079 $\overline{\tau}$ =0.31 eta=0.59

MODIS τ

- RAW
- BASE
- NEW
- STRONG



AERONET			AERONET			AERONET			AERONET	
Which		MODIS AOD	MODIS-AERONET			% -/in/+			Regression	
		Mean	>0.2	>1.0	Mean Bias	RMSE	Tolerance		Slope	r ²
RAW	(N= 997)	0.280	0.53	0.02	-0.021	0.145	19/67/13		0.908	0.58
BASE	(N= 349)	0.227	0.32	0.02	-0.071	0.151	33/62/ 3		0.857	0.70
NEW	(N= 344)	0.238	0.35	0.02	-0.059	0.146	25/71/ 3		0.835	0.75
CLIM	(N= 343)	0.250	0.36	0.02	-0.047	0.142	22/71/ 5		0.874	0.72
AERONET AOD > 0.2										
RAW	(N= 577)	0.388	0.77	0.04	-0.048	0.179	26/62/10		0.892	0.57
BASE	(N= 199)	0.326	0.52	0.04	-0.093	0.190	37/59/ 3		0.853	0.70
NEW	(N= 196)	0.330	0.58	0.04	-0.087	0.186	35/60/ 4		0.830	0.75
CLIM	(N= 195)	0.345	0.59	0.04	-0.073	0.182	33/61/ 5		0.869	0.72
	Noise	vs τ_A		vs τ_M		Est.@	Est.@	Est.@	Est.@	Est.@
Which	Floor	Diagnostic		Prognostic		0.1	0.2	0.4	0.6	1.0
RAW	0.080	0.03 +	0.22 τ	0.08 +	0.10 τ	0.09	0.10	0.12	0.14	0.18
BASE	0.072	0.06 +	0.17 τ	0.03 +	0.18 τ	0.07	0.07	0.11	0.14	0.21
NEW	0.058	0.03 +	0.24 τ	0.03 +	0.18 τ	0.06	0.07	0.10	0.14	0.21
CLIM	0.056	0.06 +	0.13 τ	0.03 +	0.17 τ	0.06	0.07	0.10	0.14	0.21